

CLAIMS

1. A portable loudspeaker for use with a personal player as hereinbefore defined, comprising a sound generating unit in a housing having an outer periphery in the shape of a storage device selected from the group consisting of a CD box, a tape cassette box, and a mini disc box.
2. A portable loudspeaker according to claim 1, in which the housing comprises an open-top box enclosure and a lid.
3. A portable loudspeaker according to claim 2, in which the lid is movable from a first position covering the enclosure opening to a second position uncovering the enclosure opening.
4. A portable loudspeaker according to claim 3, in which the lid is attached to the open-top box enclosure with a hinge.
5. A portable loudspeaker according to claim 2, 3 or 4, in which the sound generating unit is attached to or mounted in the lid.
6. A portable loudspeaker according to any one of claims 2 to 5, further comprising a further sound generating element attached to or mounted in one side of the open-top box enclosure.
7. A portable loudspeaker according to claim 6, in which the said one side opposes the enclosure opening.
8. A portable loudspeaker according to claim 6 or 7, in which the said one side is movable relative to other sides of the open-top box enclosure.
9. A portable loudspeaker according to claim 6, 7 or 8,

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in which the said one side is a second lid, with the housing being in the shape of a storage device selected from the group consisting of, a double CD box, a double tape cassette box and a double mini disc box.

- 5 10. A portable loudspeaker according to any one of the preceding claims, in which the sound generating unit comprises an acoustic radiator and a transducer mounted on or in the acoustic radiator to excite bending waves in the acoustic radiator for producing an acoustic output.
- 10 11. A portable loudspeaker according to any one of the preceding claims, in which the housing includes a radio receiver for receiving radio signal broadcasts and means for reproducing sound according to received radio signal broadcasts using the sound generating unit.
- 15 12. A portable loudspeaker according to claim 11, in which the radio receiver includes an aerial embedded in the housing.
13. A portable loudspeaker for use with a personal player as hereinbefore defined, comprising a housing comprising an
- 20 open-top box enclosure, a lid for covering the enclosure opening, a sound generating unit mounted on or in the lid, and means coupled to the sound generating unit for receiving output signals from a personal player as hereinbefore defined, wherein the lid is movable from a
- 25 first position covering the enclosure opening to a second position uncovering the enclosure opening.
14. A portable loudspeaker according to claim 13, in which the lid is attached to the open-top box enclosure with a

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hinge.

15. A portable loudspeaker according to claim 13 or 14, in which the outer periphery of the housing resembles a standard storage device selected from the group consisting of a CD box, a tape cassette box and a mini disc box.

16. A portable loudspeaker according to any one of claims 13 to 15, in which the receiving means includes a socket for use in combination with a plug electrically connected to the personal player.

17. A portable loudspeaker according to any one of claims 13 to 16, further comprising a further sound-generating unit attached to or mounted in one side of the open-top box enclosure.

18. A portable loudspeaker according to any one of claims 13 to 17, in which the sound generating unit comprises an acoustic radiator.

19. A loudspeaker comprising an acoustic radiator and a transducer mounted on or in the acoustic radiator to excite bending waves in the acoustic radiator for producing an acoustic output, characterised in that the acoustic radiator comprises a first region and a second region surrounding the first region, the first region being stiffer than the second region and having the transducer mounted on or in it.

20. A loudspeaker according to claim 19, in which the first region has a first uniform stiffness.

21. A loudspeaker according to claim 19 or 20, in which the second region has a second uniform stiffness.

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22. A loudspeaker according to claim 19,20 or 21, in which the stiffness variation is provided by the first region being thicker than the second region.

23. A loudspeaker according to claim 22, in which the first region is at least 25% thicker than the second region.

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24. A loudspeaker according to any one of claims 19 to 23, in which the amplitude of displacements in the acoustic radiator are greater at frequencies below 300Hz than they are above 300Hz.

25. A loudspeaker according to any one of claims 19 to 24, in which the acoustic radiator provides an acoustic output at least in part through pistonic movement at frequencies below 300Hz.

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15 26. A portable loudspeaker according to any one of claims 1 to 12, or 13 to 18, in which the sound-generating unit comprises a loudspeaker according to any one of claims 19 to 25.

27. A portable loudspeaker according to claim 26 in which the acoustic radiator is integrally moulded in the housing.

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